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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,076	10/30/2001	Imaddin O. Albazz	CA920000068US1	8347
7590	05/19/2005		EXAMINER	
Gregory M. Doudnikoff IBM Corporation T81/503 PO Box 12195 Research Triangle Park, NC 27709			BORISOV, IGOR N	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/004,076	ALBAZZ ET AL.	
	Examiner Igor Borissov	Art Unit 3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 February 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Amendment

Amendment received on 2/4/2005 is acknowledged and entered. Claims 17-20 have been amended. Claims 1-20 are currently pending in the application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 7-12 and 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is not within the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the

"technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, the claims are completely silent with regard to technology and is purely an abstract idea or process steps that are employed completely without the use of any technology whatsoever. The claims are no more than a suggested idea of providing guidance how to write a business contract. The method

step: *storing in a memory of the computer at least one compilation rule* recites the use of the computer only as a storage device. However, the claimed invention must utilize technology in a non-trivial manner (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (Bd. Pat. App. & Inter. 2001)). Although *Ex parte Bowman* is not precedential, it has been cited for its analysis.

In accordance with MPEP 2106 (IV)(B)(2)(b) "Statutory Process Claims", not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts. See *Diamond v. Diehr*, 450 U.S. at 183-184, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1877)). The claims in the present application do not include limitations that would suggest any physical transformation of data. The claims merely determine compilation of business rules, and parameters corresponding to the selected rules; however, said parameters appear to be an arbitrary abstract thing and not a discrete value resulting from a calculation of these parameters by a computer or processor. Thus, there neither appears to be any physical transformation of data from one form to another which is based upon an algorithm or a calculation by a computer or processor, nor is there any technology claimed that would be used to transform the data.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) a computer, or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

As to "wherein" clause, it merely states the intended use of the invention, and adds nothing to the patentability of the claim. Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

Therefore, because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 13-15 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Arnold et al. (US 5,987,423).

Arnold et al. (Hereinafter Arnold) teaches a method and system for object oriented technology framework for order processing, wherein business rules are employed for generating sales contracts, comprising:

Independent Claims.

As per **claims 1 and 7,**

Providing a plurality of business rules comprising a plurality of rules which are related to sales price and discounts, and available to be selected for inclusion in a sales contract (C. 15, L. 34-41); providing a Sales Price and Discount Policy category (policy

set) containing parameters including prices, discounts, and sales contracts; said parameters corresponding to the selected business rules (C. 15, L. 26-42); providing interconnection/links between the business rules and the corresponding category (policy set) by defining the business rules for determining which prices and discounts to use under which circumstances during the creation of the sales contract (C. 15, L. 42-49; C. 12, L. 48 – C. 13, L. 45).

As per claims 13 and 17,

Providing a plurality of business rules comprising a plurality of rules which are related to sales price and discounts, and available to be selected for inclusion in a sales contract (C. 15, L. 34-41); receiving data over a network; referencing the business rules for determining which prices and discounts to use under which circumstances during the creation of the sales contract (C. 15, L. 42-49; C. 12, L. 48 – C. 13, L. 45; C. 22, L. 52-56).

Dependent Claims.

As per claims 14 and 18,

Generating at least one document processed according to the business rules in the business contract (C. 13, L. 55 – C. 14, L. 3).

As per claims 15 and 19,

Using an operator/display interface for presenting the received information (C. 6, L. 39-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Dependent claims 2-6, 8-12, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold.

As per **claims 2 and 8**, Arnold teaches said method and system, comprising:
storing product aspects that are unique to purchase orders for generating a list of
a specified subset of products from a more general purchase product class (C. 16, L.
48-58);

generating links between the list of the specified subset of products, the policy
set and the purchase product class (C. 16, L. 48 – C. 17, L. 16).

Arnold does not specifically teach that generating the list of the specified subset
of products includes *storing a product list filter* for generating said list of said subset of
products.

However, the result of said “storing” and “generating” method steps disclosed in
Arnold is equivalent to *storing said product list filter* for generating said list of said
subset of products. Furthermore, it is noted that there is no indication in the specification
that said “filter” terminology provides the advantage over the prior art. Without such
indication, it appears that *storing a product list filter* would be an obvious variation of
storing product aspects feature disclosed in Arnold.

As per **claims 3 and 9**. Same reasoning as applied to claims 2 and 8.

As per **claims 4 and 10**, Arnold teaches said method and system, wherein the
business contract comprises dynamic elements, which can be altered without modifying
the business contract (C. 14, L. 11-24).

As per **claims 5 and 11**, Arnold teaches said method and system, wherein said
product aspects that are unique to purchase orders, are updated based on received
information (C. 14, L. 11-24).

As per **claims 6 and 12**, Arnold teaches all the limitations of claims 6 and 12,
including providing a sales contract after interconnecting and linking contract elements
(C. 15, L. 26-42; C. 22, L. 52-56), except specifically teaching that said provided sales
contract is locked.

However, it is old and well known that a contract is a binding agreement between
two or more persons or parties, and can represent a business arrangement for the
supply of certain goods or services at a fixed price (Merriam-Webster Inc.; 1985; P. 284).

Therefore, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Arnold to include that said presented sales contract is locked, because it would advantageously allow to enforce said sales contract if one of the parties is in default.

Furthermore, the examiner points out that Arnold teaches the method and system disclosing creation and maintenance of the contract, and evaluation of performance against the contract (column 11, lines 40-42), thereby indicating "locking" step.

As per **claims 16 and 20**, Arnold teaches said method and system, comprising:

providing product aspects that are unique to purchase orders for generating a list of a specified subset of products from a more general purchase product class for creating a sales contract (C. 16, L. 48-58);

generating links between the list of the specified subset of products, the policy set and the purchase product class for inclusion (C. 16, L. 48 – C. 17, L. 16).

Arnold does not specifically teach that generating the list of the specified subset of products includes *storing a product list filter* for generating said list of said subset of products.

However, the result of said "providing" and "generating" method steps disclosed in Arnold is equivalent to *providing a filtered product list*. Furthermore, it is noted that there is no indication in the specification that said "filter" terminology provides the advantage over the prior art. Without such indication, it appears that *providing a filtered product list* would be an obvious variation of *providing product aspects* feature disclosed in Arnold.

Response to Arguments

Applicant's arguments filed on 2/4/2004 have been fully considered but they are not persuasive.

In response to the applicant's argument that a phrase "storing in a memory of the computer" (Claim 7) recites technology, it is noted that in accordance with MPEP 2106

(IV)(B)(2)(b) "Statutory Process Claims", not all processes are statutory under 35 U.S.C. 101. *Schrader*, 22 F.3d at 296, 30 USPQ2d at 1460. To be statutory, a claimed computer related process must either: (A) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application within the technological arts. See *Diamond v. Diehr*, 450 U.S. at 183-184, 209 USPQ at 6 (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-788 (1877)).

The recited in the Claim 7 step of "storing in a memory of the computer" does not indicate any physical transformation of data. The method step of "generating links between the compilation of business rules and the policy set to generate specific rules to be embodied in the business contract" does not claim any technology that would be used for this step. The "generating links" step could be understood as merely determining by a business owner logical interconnections between possible events. Furthermore, said *compilation of business rules* and *the policy set* appear to be an arbitrary abstract thing and not a discrete value resulting from a calculation by a computer or processor. Thus, there neither appears to be any physical transformation of data from one form to another, which is based upon an algorithm or a calculation by a computer or processor, nor is there transform the data.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) a computer, or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble.

In response to the applicant's argument that Arnold business rules are not available for inclusion in a business contract, and that Arnold does not teach storing a policy set containing parameters corresponding to selected rules from the compilation of business rules, the examiner points out that Arnold teaches a reusable object oriented framework comprising an order processing shell that permits said framework to use a set of order management objects that facilitate creation of all types of sales

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and purchases orders. Framework extensions are then added for specific processing features, thereby providing a base from which a variety of order processing systems can be quickly and efficiently produced (C. 2, L. 41-52). The framework includes object-oriented classes that specify object data attributes and methods, thereby enabling maintaining and accessing various properties, business policies, and attributes (C. 3, L. 12-15).

Specifically, Arnold teaches Sales Price and Discount Requestor category that reviews and combines prices, discounts, and sales contracts to define the applicable prices and discounts for an order, and includes the Sales Price and Discount Requestor class. These classes *reference* the Sales Price Retriever class, which enables implementation of *business rules to select among price alternatives*. The requestor class also *references* the Sales Discount Retriever class, which enables implementation of *business rules to select among discount alternatives*. Also referenced by the Sales Price and Discount Requestor class is the Sales Price and Discount Policy class, which defines the business rules to determine which prices and discounts to use under which circumstances and to manage the prioritization between prices and discounts. Finally, the requester class references the Sales Contract Retriever, which determines prices or discounts that apply based upon sales contracts (C. 15, L. 26-49).

In response to the applicant's argument that Arnold does not teach generating links between a compilation of business rules and a policy set, and interlocking the compilation of business rules, the policy set and the links, the examiner maintains that Arnold teaches said reusable object oriented framework, including a plurality of categories responsible for creation of all types of sales and purchase orders for a company. In one embodiment, Sales Price and Discount Requestor category reviews and combines prices, discounts, and sales contracts to define the applicable prices and discounts for an order. This category includes the Sales Price and Discount Requestor class. These classes *reference* (are interlocked to) the Sales Price Retriever class, which enables implementation of *business rules to select among price alternatives*.

The requestor class also *references* (is interlocked to) the Sales Discount Retriever class, which enables implementation of *business rules to select among discount alternatives*. Sales Price and Discount Requestor class references (is interlocked to) the Sales Price and Discount Policy class, which defines the business rules to determine which prices and discounts to use under which circumstances and to manage the prioritization between prices and discounts. Finally, the requester class references (is interlocked to) the Sales Contract Retriever, which determines prices or discounts that apply based upon sales contracts (C. 15, L. 26-49).

In response to the applicant's argument that Arnold does not teach *storing a product list filter* for generating a list of a subset of products, it is noted that Arnold teaches *storing product aspects that are unique to purchase orders for generating a list of a specified subset of products* from a more general purchase product class (C. 16, L. 48-58), which is an equivalent to *storing product list filter* for generating said list of said subset of products.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (571) 272-6801.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (571) 272-6812.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231

or faxed to:

(703) 872-9306 [Official communications; including After Final communications labeled "Box AF"]

IB

5/14/2005

TAD
THOMAS A. DIXON
PRIMARY EXAMINER